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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,424	07/13/2001	Yoshinori Tomita	09792909-5074	3386

7590 07/16/2003

SONNENSCHEIN NATH & ROSENTHAL
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Chicago, IL 60606

EXAMINER

QUILLEN, ALLEN E

ART UNIT	PAPER NUMBER
2676	3

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	09/905,424	Applicant(s)	<i>dn</i>
Examiner	Allen E. Quillen	Art Unit	
		2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 July 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION***Drawings***

The drawings are objected to because in Figure 5, the term "STRAGE" is not defined in the Specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Cherabuddi, et al, U.S. Patent 6,535,966.

3. Regarding claim 1, representative of claims 2 and 4, Cherabuddi discloses a data storage device comprising: a plurality of storing means for storing data (column 4, lines 30-35); writing means for writing data to any of said storing means (Column 6, lines 65-67); reading means for reading data from any of said storing means (Column 5, lines 31-40); addressing means which, when data are to be either written by said writing means or read by said reading means, addresses

said storing means in desired increments (Column 3, line 40; Column 4, lines 57-64; Column 5, lines 5-17) by use of a unique address (lines 8-15) (content addressable memory).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

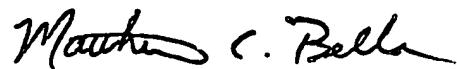
5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherabuddi, et al, U.S. Patent 6,535,966 in view of Yamamura, U.S. Patent 5,319,786.

7. Regarding claim 3, representative of claim 5, Cherabuddi discloses a data storage device according to claim 2. Cherabuddi does not disclose wherein said data are image data, and wherein said organizing methods include a method for organizing one-byte data in increments of pixels, and a method for organizing one-byte data by dividing the pixel-by-pixel one-byte data into desired increments of bits. Yamamura discloses wherein said data are image data (Column

3, lines 27-28), and wherein said organizing methods include a method for organizing one-byte data (Column 2, lines 33-39) in increments of pixels (Column 3, lines 44- 57; Column 12, line 35, *display dots*, line 67, *picture element*), and a method for organizing one-byte data by dividing the pixel-by-pixel one-byte data into desired increments of bits (Column 17, lines 18-26). The motivation for combining data storage, read/write-addressing increments by use of a unique address (page burst mode; content addressable memory) with one-byte data in increments of pixels is for lower cost video processing (fewer registers, Column 1, lines 60-64) and processing amount and time (speed, Column 2, line 35; *trigger a DMA transfer*, Column 17, lines 8-27). Yamamura is evidence that at the time of the invention, it would have been obvious to one skilled in the art of computer image processing to combine the benefits of page burst mode and content addressable memory, as Cherabuddi discloses, with one-byte data pixel data-words for video applications, as Yamamura teaches, to achieve more cost effective image processing advantages.



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584. The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829..

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Or FAX'd to:

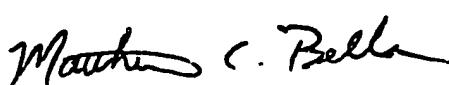
(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen
Patent Examiner
Art Unit 2676

July 1, 2003



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
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